Geophysical Research Abstracts Vol. 20, EGU2018-2550-1, 2018 EGU General Assembly 2018 © Author(s) 2018. CC Attribution 4.0 license.



Monitoring and forecasting oil platforms leakages in the Mediterranean and Black Sea

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To address the access of marine data, the European Commission has established the European Marine Observation and Data Network (EMODnet), providing a single entry point for retrieving marine data derived from the EMODnet thematic portals, the Copernicus Marine Environmental Monitoring Service (CMEMS) and other initiatives at the European seas. In order to test and evaluate how comprehensive and accurate are the monitoring and forecasting marine data available through the EMODnet and CMEMS thematic portals eleven challenges were defined. One of the EMODnet check point challenges is the "oil platform leaks", which aims to provide oil spill predictions to determine the likely trajectory of the oil slick and the statistical likelihood that sensitive coastal habitats or species or tourist beaches will be affected. The "oil platform leaks" challenge handles the ability to produce oil spill predictions in the Mediterranean, Black Sea and other European seas.

In the framework of the above EC activities, monitoring and forecasting for oil platforms leakages were carried out during the year 2017, following the expansion of the exploration and exploitation of the hydrocarbons in the Eastern Mediterranean Levantine in the last five years and the increase of the maritime transport in the region after the enlargement of the Suez canal in the last two years. The monitoring for oil platform leakages was carried out using SAR data from ESA Sentinel's satellites, while oil spill predictions were carried out for 48-72 hours using the well established MEDSLIK oil spill model and met-ocean data from CMEMS, CYCOFOS and SKIRON. From the 20 existing offshore platforms/wells in the region, a systematic oil platform leakage was revealed from a dedicated offshore platform in the EEZ of Egypt located northwest from the Port Said (entrance/exist of the Suez canal), almost throughout the monitoring period.